

WHAT IS CLAIMED:

1. An overlap portion associated with a cover material on a stent.

2. The assembly of claim 1, wherein the cover material has a distal end and a proximal end.

5 3. The assembly of claim 2, wherein the cover material distal end and proximal end are attached to the stent.

4. The assembly of claim 3, wherein the overlap portion is positioned between the distal end and the proximal end of the cover material.

10 5. The assembly of claim 4, wherein the cover material is formed from a single piece of material.

6. The assembly of claim 1, wherein the cover material is formed of a first section and a second section.

7. The assembly of claim 6, wherein the first section has a proximal end and a distal end and the first section is shorter than the overall length of the stent.

*Sub D2*  
8. The assembly of claim 7, wherein the second section has a proximal end and a distal end and the second section is shorter than the overall length of the stent.

*Sub 5*  
9. The assembly of claim 8, wherein the proximal end of the first section forms the overlap portion with the distal end of the second section.

10. ~~The assembly of claim 9, wherein the first section and the second section are configured for relative sliding movement at the overlap portion when the stent is expanded.~~

10 11. The assembly of claim 5, wherein the single piece of the cover material has an overlap portion between a distal end and a proximal end of the cover material.

12. ~~The assembly of claim 11, wherein the overlap portion has three layers.~~

15 13. The assembly of claim 12, wherein the three layers have relative sliding movement to each other when the stent is expanded.

*Sub 4*  
14. ~~The assembly of claim 2, wherein the cover material is attached to the stent at the stent distal end and the proximal end.~~

15. The assembly of claim 14, wherein the cover material is attached to the stent by an adhesive.

5 16. The assembly of claim 1, wherein the cover material is formed from a biocompatible material taken from the group of materials consisting of ePTFE, PTFE and polyurethane.

5 17. The assembly of claim 1, wherein the cover material is formed of more than two sections.

18. The assembly of claim 17, wherein the more than two sections of the cover material forms more than one overlap portion along the stent.

10 19. The assembly of claim 1, wherein the covered material has a thickness in the range of 0.0005 to 0.010 inch.

20. A covered stent assembly, comprising:  
an intravascular stent having a distal end and a proximal end;  
a tubular cover material covering at least a portion of the stent; and  
the cover material forming an overlap portion so that as the stent expands the overlap portion shortens, thereby preventing the stent from substantially shortening.

10 21. The assembly of claim 20<sup>9</sup>, wherein the cover material has a distal end and a proximal end.

11 22. The assembly of claim 21<sup>10</sup>, wherein the cover material distal end and proximal end are attached to the stent.

5 12 23. The assembly of claim 22<sup>11</sup>, wherein the overlap portion is positioned between the distal end and the proximal end of the cover material.

24. ~~The assembly of claim 23, wherein the cover material is formed from a single piece of material.~~

10 25. ~~The assembly of claim 21, wherein the cover material is formed of a first section and a second section.~~

26. The assembly of claim 25, wherein the first section has a proximal end and a distal end and the first section is shorter than the overall length of the stent.

15 27. The assembly of claim 26, wherein the second section has a proximal end and a distal end and the second section is shorter than the overall length of the stent.

~~28. The assembly of claim 27, wherein the proximal end of the first section forms the overlap portion with the distal end of the second section.~~

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~~29. The assembly of claim 28, wherein the first section and the second section are configured for relative sliding movement at the overlap portion when the stent is expanded.~~

~~30. The assembly of claim 24, wherein the single piece of the cover material has an overlap portion between a distal end and a proximal end of the cover material.~~

~~31. The assembly of claim 30, wherein the overlap portion has three layers.~~

~~32. The assembly of claim 31, wherein the three layers have relative sliding movement to each other when the stent is expanded.~~

~~33. The assembly of claim 21, wherein the cover material is attached to the stat at the stent distal end and the proximal end.~~

~~34. The assembly of claim 33, wherein the cover material is attached to the stent by an adhesive.~~

Sub C10 35. The assembly of claim 20, wherein the cover material is formed from a biocompatible material taken from the group of materials consisting of ePTFE, PTFE and polyerethane.

19 36. The assembly of claim 20, wherein the cover material is formed of more than two sections.

37. The assembly of claim 36, wherein the more than two sections of the cover material forms more than one overlap portion along the stent.

Sub D6 38. The assembly of claim 20, wherein the covered material has a thickness in the range of 0.0005 to 0.010 inch.

10 39. The assembly of claim 1, wherein the cover material can be formed of either porous or non-porous material.

22 40. The assembly of claim 20, wherein the cover material can be formed of either porous or non-porous material.

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